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10/519,031	12/22/2004	Fabienne Cuesta	PW/3-22710/A/PCT	7044

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EXAMINER

BALASUBRAMANIAN, VENKATARAMAN

ART UNIT PAPER NUMBER

1624

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/519,031

Applicant(s)

CUESTA ET AL.

Examiner

Venkataraman Balasubramanian

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicants' response, which included cancellation of claims 1-9 and 11-17, filed on 8/15/2006, is made of record. Claim 10 is now pending.

In view of applicants' cancellation of claims 1-9 and 11-17, all prior art rejections made in the previous office action has been rendered moot.

Upon further consideration, the Finality of the previous office action is withdrawn to apply the following new grounds of rejections.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Fringeli, US 3,895,009.

Fringeli teaches several triazinyl-stibene compounds as optical brighteners, which include compounds claimed in claim 10 for the same use. See column 1, formula I and note unsymmetrical triazinyl compounds are embraced in the said formula as required by instant claim. See entire document. Especially see examples 1 and 2 for methyl, ethyl, propyl, butyl and isopropyl compounds (compounds 6-10).

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schussler et al., US 4,946,628.

Schussler et al. teaches several triazinyl-stilbene compound of formula I, shown in column 1, useful as fluorescent whitening agents, which include generically instant compounds. See column 1, formula I and note all the definition of variable groups overlap with instant those of triazinyl-stilbene sulfonic acid core. Particularly note, when

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A is chosen independently, the compounds taught by Schussler, include compounds of instant claim 10. See entire document. Especially see Table in column 4-5, for examples of 19 compounds made. Although the examples 1-19, show same A choices, Schussler et al. teaches equivalency of the exemplified compounds with those generically claimed including where A choices on the two triazine rings are different as noted above.

Hence, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted in triazine ring including those generically taught as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gold et al., US 3,532,692.

Gold et al. teaches several triazinyl-stilbene compound of formula I, shown in column 1-2, useful as fluorescent whitening agents, which include generically instant compounds. See column 1-2, formula shown therein and note all the definition of variable groups overlap with instant those of triazinyl-stibene sulfonic acid core. Particularly note, when  $R_2$  is chosen independently, the compounds taught by Gold et al., include compounds of instant claim 10. See entire document. Especially see Table in column 3 and examples 1-6 for compounds made. Although the examples 1-6, show same  $R_2$  choices, Gold et al. teaches equivalency of the exemplified compounds with

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those generically claimed including where  $R_2$  choices on the two triazine rings are different as noted above.

Hence, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted in triazine ring including those generically taught as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eckstein et al., EP 0060439.

Eckstein et al. teaches quaternary ammonium salt and other salts of several triazinyl-stilbene compound of formula I, shown in page 1 and formula II, page 4, useful as fluorescent whitening agents, which include generically instant compounds. See formula I and formula II. In formula II, note all the definition of variable groups overlap with instant those of triazinyl-stilbene sulfonic acid core. Particularly note, when  $X_1$  and  $X_2$  are chosen independently, the compounds taught by Eckstein, include compounds of instant claim 10. See entire document. Especially, see pages 9-17 including Table in page 13, for examples of 14 compounds made. Although the examples 1-14, show same  $X_2$  choices, Eckstein et al. teaches equivalency of the exemplified compounds with those generically claimed including where  $X_2$  choices on the two triazine rings are different as noted above.

Hence, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted in triazine ring

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including those generically taught as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schussler et al., US 4,946,628 or Gold et al., US 3,532,692 or Eckstein et al., EP 0060439 in view of Fringeli US 3,895,009.

Teaching of Schussler et al., Gold et al., and Eckstein et al., as discussed above is incorporated herein. As noted above each one of them teaches several triazinyl-stilbene compounds including the symmetrical and unsymmetrical substituents in the triazine ring useful as fluorescent whitening agents, which include generically instant compounds. Each one of them also teaches equivalency of the exemplified compounds with those generically claimed including unsymmetrical triazines with different substituents on the triazine ring as noted above. However, they do not show any examples of unsymmetrical triazines corresponding instant R<sub>1</sub> and R<sub>2</sub> choices.

Teachings of Fringeli as discussed in the above 102 rejection is incorporated herein. As noted in the above 102 rejection, Fringeli et al., teaches several such unsymmetrical triazinyl-stilbene compounds which anticipate the instant claim. See compounds 6, 7, 8, 9 and 10. the compounds taught also overlap with those generically taught by Schussler et al., Gold et al., and Eckstein et al., See morpholino compound in each reference. Hence, one trained in the art would expect both the unsymmetrical and symmetrically substituted triazinyl-stilbene to be optical brighteners.

Hence, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of the primary references and the secondary reference and make compounds variously substituted in triazine ring including symmetrical and unsymmetrical triazinyl compounds generically taught in Schussler et al., Gold et al., and Eckstein et al., in view of Fringeli's teaching and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fringeli US 3,895,009.

Teachings of Fringeli as discussed in the above 102 rejection is incorporated herein. As noted in the above 102 rejection, Fringeli et al., teaches several such unsymmetrical triazinyl-stilbene compounds which anticipate the instant claim.

Instant claim permits  $\text{NH}_2$  and  $\text{CH}_3\text{-N-C}_1\text{-C}_4\text{-alkyl}$  for  $\text{R}_1$  and  $\text{R}_2$  groups.

While said compounds do not anticipate the scope of instant claims, they are very closely related having  $\text{NH}_2$  in the instant claim versus  $\text{NHCH}_3$  in the reference as well as  $\text{CH}_3\text{-N-C}_1\text{-C}_4\text{-alkyl}$  in the instant claim versus  $\text{H-N-C}_1\text{-C}_4\text{-alkyl}$  in the reference. However, compounds that differ only in having H vs Me on nitrogen are not deemed patentably distinct absent evidence of superior or unexpected properties. See for compounds that differ only as H vs Me on nitrogen, Ex parte Weston 121 USPQ 428; In re Doebel 174 USPQ 156.

Thus, one skilled in the art at the time of the invention would have been motivated to make compounds that have methyl on the nitrogen and expect the these



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compounds to possess the utility in the instant case in view of the close structural similarity outlined above.

### **Conclusion**

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (571) 272-0662. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM. The Supervisory Patent Examiner (SPE) of the art unit 1624 is James O. Wilson, whose telephone number is (571) 272-0674.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAG. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-2 17-9197 (toll-free).

  
Venkataraman Balasubramanian

8/29/2006